

NOTES ON THE FLORA OF SOUTHERN CHINA<sup>1</sup>

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THE MATERIAL used in preparing these notes is, in part, that assembled through botanical explorations conducted in recent years by representatives of Lingnan University and the Botanical Institute of Sun Yatsen University with the coöperation of the Arnold Arboretum. This paper deals mainly with the flora of Kwangtung Province exclusive of the island of Hainan. Ten species and two varieties from Kwangtung and Kwangsi are herein proposed as new, while a number of previously described species are for the first time credited to one or both of these provinces. Two new species from adjacent parts of southern Kiangsi and southern Fukien are also included. The synonymy of a few other species is adjusted. All types of the new entities herein described are deposited in the herbarium of the Arnold Arboretum.

## ROSACEAE

*Pyracantha* M. Roemer

*Pyracantha Fortuneana* (Maxim.) comb. nov.

*Photinia Fortuneana* Maxim. Bull. Acad. Sci. St. Pétersb. 19: 179. 1873, Mém. Biol. 9: 179. 1873.

*Photinia crenato-serrata* Hance, Jour. Bot. 18: 261. 1880, syn. nov.

*Pyracantha crenato-serrata* Rehder, Jour. Arnold Arb. 12: 72. 1933, cum syn.

A photograph of a duplicate type of *Photinia Fortuneana* Maxim. from Kew (*Fortune A69*, 1845) and fragments of leaves and flowers in the herbarium of the Arnold Arboretum indicate that Maximowicz's species is not only a *Pyracantha* but that it is also the same as the form currently known as *Pyracantha crenato-serrata* (Hance) Rehder. The original descriptions of Maximowicz and of Hance are in full agreement. Among the other synonyms are *Cotoneaster Pyracantha* sensu Pritzl (1900) pro parte, non Spach, *Pyracantha crenulata* sensu C. Schneider (1906) pro parte, non Roemer, *Pyracantha crenulata* var. *yunnanensis* M. Vilmorin (1913), and *Pyracantha yunnanensis* Chittenden (1921). As Maximowicz's name is seven years earlier than that of Hance, a new combination is here effected. The exact locality of Fortune's specimen is not given, but most probably it was from the coastal regions of eastern China. The species is recorded from Shensi, Kansu, Szechuan, Hupeh, Yunnan, Kweichow, and Kwangsi.

*Rubus Gressittii* Metcalf, Lingnan Sci. Jour. 19: 25. 1940.

KWANGTUNG: T'sung-hwa District, Sam Kok Shan, Ch'an Woh T'ung Village, *W. T. Tsang 25064*, May 1-25, 1935, a climber 4 ft. high, fairly common in swamps, flowers white, fruit edible; Jen-hwa District, *W. T. Tsang 26403*, May 21-30, 1936, a climber, 3 ft. high, fairly common in thickets, flowers white. Kiangsi. New to Kwangtung.

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*Rubus pinfaensis* H. Lév. & Vaniot, Bull. Soc. Agri. Sci. Arts Sarthe 39: 320. 1904, Repert. Nov. Sp. 6: 374. 1909; Focke, Bibl. Bot. 17[Heft 72]: 199. f. 81. 1911, et in Sargent, Pl. Wils. 1: 55. 1911; Rehder, Jour. Arnold Arb. 18: 50. 1937.

*Rubus erythrolascius* Focke, op. cit. 197. f. 79. 1911, syn. nov.

This species is of wide distribution in southern China. With a large series of specimens before me, I am convinced that the two supposedly different species are conspecific. The reduction of Focke's species is based on an examination of an isotype (*Henry 10583* of Lunan, Yunnan) in the herbarium of the Arnold Arboretum.

*Rubus pinnatisepalus* Hemsl. Jour. Linn. Soc. Bot. 29: 305. 1892; Focke, Bibl. Bot. 19[Heft 83]: 29. 1914.

*Rubus calycanthus* H. Lév. Repert. Sp. Nov. 8: 58. 1910, Fl. Kouy-Tchéou 357. 1915; Focke, Bibl. Bot. 19[Heft 83]: 34. 1914, sub *R. Labbei*; Cardot, Bull. Mus. Hist. Nat. Paris 23: 282. 1917; Hand.-Maz. Symb. Sin. 7: 494. 1913; Rehder, Jour. Arnold Arb. 18: 31. 1937, cum syn., syn. nov.

*Rubus laciniatostipulatus* Hayata ex Koidzumi, Jour. Coll. Sci. Tokyo 34(2): 154. 1913; Hayata, Ic. Pl. Formos. 3: 91. 1913, syn. nov.

*Rubus echinoides* Metcalf, Lingnan Sci. Jour. 19: 24. 1940, syn. nov.

An examination of type or authentic material representing all the above species indicates that they represent a single one for which Hemsley's name is the earliest. The species extends from Szechuan through southern China to Formosa. In addition to the type material of Léveillé's species cited by Rehder, who combines *Rubus calycanthus* var. *Buergerifolia* H. Lév., *R. Labbei* H. Lév. & Vaniot, and *R. Darrissi* H. Lév., all from Kweichow, *R. pinnatisepalus* Hemsl. from Szechuan (holotype, *Faber 505*) is represented by a photograph and fragments of flowers, *R. laciniatostipulatus* Hayata is represented by a topotype (*G. Shimada 116*) from Samkakuyu, Formosa, and *R. echinoides* Metcalf is represented by the holotype (*R. C. Ching 6679*) from Kwangsi in the herbarium of the Arnold Arboretum. Among the recent collections, *S. W. Teng 90780* and *90954*, from Kweichow, and *S. P. Ko 55665* from Kwangsi belong to this species.

*Rubus kwangtungensis* sp. nov. Subgenus *Idaeobatus*, § *Rosaefolii*.

Planta 0.6 m. alta, caulibus aculeatis glabris vel sparse setosis, setis glanduloso-stipitatis, aculeis minutis vix 1 mm. longis; foliis pinnatis, cum petiolis ad 30 cm. longis, petiolis rhachibusque glabris raro 1-2-aculeatis; petiolis circiter 7.5 cm. longis; stipulis linearibus, 3-4 mm. longis, petiolorum basi insertis; foliolis 7-9, sessilibus vel breviter (1-2 mm.) petiolulatis, membranaceis, lanceolatis, 9-10 cm. longis, 2-2.3 cm. latis, longe caudato-acuminatis, basi late acutis vel subrotundatis, margine simpliciter serrulatis, supra sparse minuteque setosis, subtus subscariosis, minute glanduloso-squamosis, venis lateralibus utrinsecus 12-15, arcuato-adscendentibus, venulis obscuris; floribus solitariis axillaribus, circiter 3 cm. diametro; pedicellis 3-4 cm. longis, glanduloso-setosis; calycis tubo 2-3 mm. longo, extus glabro vel sparse glanduloso-setoso, lobis ovato-lanceolatis, 1.5-1.8 cm. longis, 0.4-0.5 cm. latis, longe caudato-acuminatis, utrinque ad marginem puberulis; petalis albidis subcoriaceis obovatis, circiter 1.8 cm. longis et 1 cm. latis; staminibus numerosis; carpellis numerosis, in capitulo elongato-ovato dispositis; fructibus subglobosis, circiter 1 cm. diametro, drupulis parvis numerosis.

KWANGTUNG: T'sung-hwa District, Sam Kok Shan, Ch'an Woh T'ung Village, *W. T. Tsang* 25180 (TYPE), May 1-25, 1935, 2 ft. high, fairly common in swamp, flowers white, fruit yellow.

This species is allied to *Rubus rosaefolius* J. E. Smith, differing in the long-lanceolate and simple-serrulate leaflets and the larger flowers.

## THEACEAE

### Hartia Dunn

*Hartia nitida* sp. nov.

Frutex circiter 3 m. altus, ramulis teretibus, junioribus leviter villosis; foliis glabris, coriaceis, oblongo-lanceolatis, 10-13.5 cm. longis, 3.5-5 cm. latis, acuminatis, basi rotundatis, margine remote serrulatis, in sicco olivaceis, utrinque subconcoloribus, supra nitidis, nervis lateralibus utrinsecus 10-14, gracilibus, cum venulis supra subimpressis, subtus subelevatis; petiolo 1.5-1.8 cm. longo, 3 mm. lato, leviter villosus vel subglabro; floribus ignotis; capsulis ovoideis, acuminatis, circiter 1 cm. diametro, 5-valvis; sepalis persistentibus orbicularibus, 5 mm. diametro, rotundatis, extus leviter pubescentibus vel glabris, margine ciliatis; pedicellis 4-6 mm. longis.

KWANGTUNG: Ta-pu District, Tai Mo Shan, *W. T. Tsang* 21252 (TYPE), July 21, 1932, a shrub 10 ft. high, abundant on dry steep slopes.

In the small fruits, this species is near *Hartia micrantha* Chun, but it can be distinguished by its relatively long leaves, which are shining above.

### Adinandra Jack

*Adinandra jubata* sp. nov.

Frutex circiter 2.3 m. altus, ramulis novellis dense villosis, indumento ad 6 mm. longo, luteo-brunneo, iridescente; foliis subcoriaceis, lanceolatis, 12-15 cm. longis, 3-4.2 cm. latis, acuminatis, basi late acutis, margine integris, supra glabris, subtus dense villosis, indumento ad 6 mm. longo, luteo-brunneo, iridescente, costa supra impressa, subtus elevata, nervis lateralibus circiter 20, supra subconspicuis vel inconspicuis, subtus in tomento fere occultato, venis tertiariis inconspicuis; petiolo 3-5 mm. longo, villosus; floribus ignotis; fructibus solitariis axillaribus ovoideis, circiter 10 mm. longis et 8 mm. latis, dense longe villosis, stylo persistente, 6-7 mm. longo, inferne villosus, superne glabro, stigmatate inconspicuo; sepalis persistentibus ovatis, circiter 10 mm. longis, 6-7 mm. latis, extus dense villosis, intus glabris; pedicellis 6-7 mm. longis, villosis.

KWANGTUNG: Hwei-yang District, Lin Fa Shan, Shek Shing Village, *W. T. Tsang* 25601 (TYPE), Aug. 25 or 26, 1935, a shrub 7 ft. high, fairly common, fruits black, edible.

An elegant species with the young branches, lower surfaces of the leaves, and the fruits covered by dense villose iridescent brownish hairs. It is apparently near *Adinandra glischroloma* Hand.-Maz., differing chiefly in the longer and relatively narrower leaves and the much denser and longer hairs. On the lower surfaces of the leaves, the pubescence completely obliterates the venation.

*Adinandra nitida* Merrill in herb. sp. nov.

Frutex 4 m. altus, omnino glaber, ramulis novellis teretibus purpureo-brunneis; foliis subcoriaceis, ovato-oblongis, 10-12.5 cm. longis, 2.5-5 cm.

latis, acuminatis, basi acutis, margine leviter serrulatis, in sicco supra nitidis, atro-olivaceis, subtus pallidioribus, costa supra leviter elevata, subtus distincte elevata, nervis lateralibus utrinsecus 12-16, utrinque subconspicuis, venis tertiariis inconspicuis; petiolo 1-1.5 cm. longo, supra canaliculato; floribus solitariis axillaribus, 2-bracteatis, bracteis ovatis acutis subcoriaceis, 6-7 mm. longis, 4-5 mm. latis, pedicellis 1.2-1.5 cm. longis; sepalis ovatis acutis, 11-14 mm. longis, 7-8 mm. latis, margine integris; petalis ovatis, 16 mm. longis, 8-10 mm. latis; staminibus circiter 10 mm. longis, filamentis glabris, antheris ciliatis, acuminatis; ovario ovoideo, glabro, 5 mm. longo, stylo glabro, 1-1.4 cm. longo, stigmatibus 3-fido; fructibus ovoideis, 8 mm. longis, acuminatis, rostratis, sepalis persistentibus.

KWANGTUNG: Hwei-yang District, Lin Fa Shan, Lin Fung Monastery, *W. T. Tsang* 25656, Aug. 11-31, 1935, a shrub 20 ft. high, fairly common in thickets, fruit black, edible. KWANGSI: Shang-sze District, Shih Wan Tai Shan, near Iu Shan Village, *W. T. Tsang* 22322 (TYPE), May 18, 1933, a shrub 12 ft. high, abundant in thickets, flowers white, fragrant; same locality, near Hoh Lung Village, *W. T. Tsang* 22571, June 26, 1933, a shrub 10 ft. high, abundant in thickets, fruits black; same locality, near Tang Lung Village, *W. T. Tsang* 24431, Oct. 1-16, 1934, a shrub 7 ft. high, abundant, fruits yellow, edible; Yao Shan, Tseung-yuen, *C. Wang* 39413, June 18, 1936, a small tree along stream, flowers white.

A species allied to *Adinandra acutifolia* Hand.-Maz., differing in the much larger flowers with glabrous petals and ovaries.

## THYMELAEACEAE

### *Wikstroemia* Endlicher

*Wikstroemia pilosa* Cheng, Contr. Biol. Lab. Sci. Soc. China 8: 140. f. 6. 1932; Chun, Sunyatsenia 1: 276. 1934.

*Wikstroemia sericea* Domke, Notizbl. Bot. Gart. Berlin 11: 356. 1932; Chun, Sunyatsenia 4: 182. 1940; non Christoph. 1931.

*Wikstroemia kulingense* Domke, Notizbl. Bot. Gart. Berlin 13: 388. 1936.

Kwangtung, Chekiang, Kiangsi.

Chun (l.c.) adopted *W. sericea* Domke in 1940 instead of *W. pilosa* Cheng, as the former name was nine months earlier, but he overlooked the fact that Domke's specific name was invalidated by Christophersen's species of 1931 from the Cook Islands. Cheng's name is thus the one that should be accepted for the Chinese species, as it in turn is older than *W. kulingense* Domke, 1936.

## CORNACEAE

### *Cornus* Linnaeus

*Cornus ferruginea* Wu, Bot. Jahrb. 71: 199. 1940.

KWANGTUNG: Hwei-yang District, Lin Fa Shan, Lin Fung Monastery, *W. T. Tsang* 25632, Aug. 11-31, 1935. Originally described from Yao Shan, Kwangsi; new to Kwangtung.

This species falls into the subgenus *Benthamia* Lindl., a group containing species with capitate flowers, for which Hutchinson, Ann. Bot. 6(21): 92. 1942, proposed the generic name *Dendrobenthamia*. He overlooked Wu's species, however.

## STYRACACEAE

*Styrax* Linnaeus

*Styrax subcrenata* Hand.-Maz. Oesterr. Bot. Zeitschr. 80: 342. 1931.

KWANGSI: Pin-lan, *S. P. Ko* 55648, Aug. 27, 1935, a small tree in woods on slopes; Chuen Yuen, *Z. S. Chung* 81981, June 15, 1937, 82058, June 19, 1937, a tree in woods along streams. KWANGTUNG: Sin-fung District, Ah Po Kai Shan, Ch'a P'ing Village, *Y. W. Taam* 721, May 1-24, 1938, a small tree 20 ft. high, abundant in thickets. Originally described from Hainan; new to Kwangtung proper and Kwangsi. The leaves of the specimens above cited are in general more distinctly crenate than in the Hainan plants.

## SYMPLOCACEAE

*Symplocos* Jacquin

*Symplocos Ernesti* Dunn, Jour. Linn. Soc. Bot. 39: 499. 1911; Hand.-Maz. Symb. Sin. 7: 806. 1936; Rehder, Jour. Arnold Arb. 18: 233. 1937.

*Symplocos Wilsoni* Brand, Repert. Nov. Sp. 3: 216. 1906, non Hemsley.

*Symplocos coronigera* H. Lév. Repert. Sp. Nov. 10: 431. 1912; Rehder, Jour. Arnold Arb. 18: 233. 1937.

KWANGTUNG: Hop-Po District, *H. Y. Liang* 69360, June 5, 1937, a small tree 5 m. high, in light woods. KWANGSI: Shang-sze District, Shih Wan Tai Shan, Tang Lung Village, *W. T. Tsang* 24325, Sept. 22, 1934, a shrub 5 ft. high, fairly common, flowers white, fragrant. Hupeh, Szechuan, Yunnan, Hunan, Kweichow. New to Kwangtung and Kwangsi.

*Symplocos lancilimba* Merr. Philip. Jour. Sci. Bot. 23: 259. 1923.

KWANGTUNG: Jen-hwa District, Man Chi Shan, Shek Pik Ha Village, *W. T. Tsang* 26351, May 11-20, 1936, a shrub 5 ft. high, fairly common in thickets in sandy soil; Sin-fung District, Ngok Shing Shan, Sai Lin Shan Village, *Y. W. Taam* 410, March 23-31, 1938, a shrub 8 ft. high, abundant in thickets. Hainan; new to Kwangtung proper.

*Symplocos kwangtungensis* sp. nov. Subgen. *Hopea*, § *Bobua*, *Lodhra*.

Arbor parva 6 m. alta, ramulis novellis gracilibus teretibus minute pubescentibus; foliis membranaceis breviter petiolatis oblongo-ovatis, 8-11 cm. longis, 3-3.5 cm. latis, acuminatis, basi late cuneatis vel rotundatis, supra subnitidis glabris costa leviter pubescente excepta, costa nervisque supra impressis, subtus elevatis, nervis lateralibus utrinsecus 5 vel 6 valde arcuato-adscendentibus anastomosantibus, venis tertiariis reticulatis, utrinque subconspicuis; petiolis 2-3 mm. longis, fulvo-pilosis; floribus ignotis; infructescentiis fasciculatis axillaribus sessilibus 5-7-fructigeris, bracteis persistentibus late ovatis, 2 mm. longis, extus minute pubescentibus, fructibus globosis, 6 mm. diametro, 1-ocularibus, glabris, lobis calycinis persistentibus oblongis obtusis, 2 mm. longis.

KWANGTUNG: Na Leung River, Shih Wan Tai Shan, *H. Y. Liang* 69487 (TYPE), July 8, 1937, a tree 6 m. high, in forests along streams.

This species is close to *Symplocos glandulifera* Brand and *S. yunnanensis* Brand, differing from both in the shorter leaves and the spherical fruits.

*Symplocos cordatifolia* sp. nov. Subgen. *Hopea*, § *Bobua*, *Lodhra*.

Frutex circiter 2 m. altus, ramis nigris parce pilosis, ramulis teretibus gracilibus dense brunneo-pilosis; foliis membranaceis vel subchartaceis breviter petiolatis oblongo-ovatis, 5-7 cm. longis, 2-2.5 cm. latis, longe

acuminatis, basi valde cordatis, margine serratis, supra viridibus haud nitidis glabris, subtus pallide viridibus pilosis, nervis lateralibus utrinsecus 5 vel 6 utrinque perspicuis arcuato-anastomosantibus, venis tertiariis reticulatis utrinque distinctis; petiolis 2 mm. longis, dense pilosis; inflorescentiis axillaribus, in ramulis hornotinis orientibus, fasciculatis, fasciculis 3-floris breviter pedunculatis, pedunculis circiter 2 mm. longis, pubescentibus; floribus sessilibus, bracteis late ovatis glabris, 1 mm. longis; calycis tubo crasso, circiter 1 mm. longo, lobis 3 late ovatis glabris, 1 mm. longis; petalis 5 albis oblongis, 3.5 mm. longis, glabris; staminibus circiter 15, filamentis liberis glabris, circiter 4 mm. longis; disco inconspicuo; stylo 5 mm. longo.

KWANGTUNG: Hwei-yang District, Lin Fa Shan, Sam Hang Shek T'an Village, *W. T. Tsang* 26027 (TYPE), Oct. 1-19, 1935, a shrub 7 ft. high, fairly common in thickets, flowers white, fragrant.

A distinct species, characterized by its distinctly cordate, somewhat membranaceous leaves, which are pilose beneath, and by the few-flowered, short, fascicled inflorescences and the three sepals.

*Symplocos spathulata* sp. nov. Subgen. *Hopea*, § *Bobua*, *Lodhra*.

Arbor parva 4 m. alta, ramulis atro-brunneis glabris; foliis subcoriaceis breviter petiolatis oblongo-obovatis, 6-10 cm. longis, 3-4.5 cm. latis, obtusis vel rotundatis, basi attenuatis, margine integris raro ad apicem paucis denticulatis, utrinque glabris, supra atro-viridibus, subtus pallide viridibus, costa supra impressa, subtus valde elevata, nervis lateralibus utrinsecus circiter 10 utrinque perspicuis prope marginem graciliter anastomosantibus, venis tertiariis reticulatis, utrinque subconspicuis; petiolis crassis glabris, circiter 5 mm. longis; floribus ignotis; infructescentiis axillaribus sessilibus vel breviter pedunculatis, pedunculis ad 8 mm. longis, pubescentibus, bracteis late ovatis, 3 mm. longis, pubescentibus, fructibus singularibus vel paucis fasciculatis sessilibus oblongis, 8 mm. longis, 3 mm. crassis, 1-locularibus, indistincte longitudinaliter striatis, lobis calycinis persistentibus late ovatis, 2.5 mm. longis, glabris.

KWANGTUNG: Hop-Po District, *H. Y. Liang* 69359 (TYPE), June 5, 1937, a small tree 4 m. high, in light woods; east of Tung Hing City, *H. Y. Liang* 69448, July 7, 1937, a small tree 4 m. high, in forests.

In the glabrous branches, impressed midrib, and the fascicled, elongated, and slightly grooved fruits, this species is close to *Symplocos congesta* Benth. It can be readily distinguished from the latter in the obovate, almost spatulate, usually round-tipped leaves, and the shorter and smaller fruits, single or sometimes clustered on a short, pubescent peduncle.

## VERBENACEAE

### *Callicarpa* Linnaeus

*Callicarpa integerrima* Champ. var. *serrulata* var. nov.

A typo speciei differt foliis serrulatis.

KWANGTUNG: T'sung-hwa District, Sam Kok Shan, Ch'an Woh T'ung Village, *W. T. Tsang* 25228 (TYPE), May 1-25, 1935.

*Callicarpa rubella* Lindl. var. *Dielsii* (H. Lév.) comb. nov.

*Viburnum Dielsii* H. Lév. Repert. Sp. Nov. 9: 443. 1911, Fl. Kouy-Tchéou 66. 1914.

*Callicarpa Dielsii* P'ei, Mem. Sci. Soc. China 1(3): 37. 1932; Rehder, Jour. Arnold Arb. 15: 323. 1934.

*Callicarpa rubella* Lindl. var. *Hemsleyana* Diels f. *subglabra* P'ei, Mem. Sci. Soc. China 1(3): 41. 1932.

CHEKIANG: Siachu, R. C. Ching 1760 (isotype of *C. rubella* var. *Hemsleyana* f. *subglabra*), June 3, 1924; no precise locality, S. Chen 414, July 2, 1932, 793, 795, Sept. 21, 1932. KWEICHOW: Pin-fa, J. Cavalerie 385 (HOLOTYPE of *Viburnum Dielsii* H. Lév., photo. and merotype in AA), Sept. 4, 1902; Hsufeng, She-loong-san, S. W. Teng 90440B, Jan. 20, 1936. KWANGSI: Ch'uan District, Pai-yun-an, W. T. Tsang 27598, June 3, 1937; Ling-chuan District, Ta-ling, Yang-wu Village, W. T. Tsang 27922, July 21-30, 1937; Yao Shan, Tseung-yuen, C. Wang 39374, June 16, 1936; Ping Nan District, C. Wang 40371, Nov. 1, 1936. KWANGTUNG: Mei District, Yam Na Shan, W. T. Tsang 21319, Aug. 4-31, 1932.

A glabrescent variety of the widely distributed species.

### Clerodendron Linnaeus

*Clerodendron kwangtungense* Hand.-Maz. var. *puberulum* var. nov.

A typo speciei differt foliis utrinque parce puberulis, inflorescentiis dense puberulis.

KWANGTUNG: Yang-shan District, Yang Shan, T. M. Tsui 785 (TYPE), July-Sept., 1932, a shrub 9 ft. high, fruit bluish.

*Clerodendron elachistanthum* Merrill in herb. sp. nov.

Frutex circiter 1 m. altus, ramulis brunneis glabris; foliis chartaceis longe petiolatis ovato-cordatis vel ovatis, 12-15 cm. longis, 7.5-10 cm. latis, acuminatis, basi late truncatis vel subcordatis, 5-nerviis, margine integris, supra glabris, subtus minute puberulis, nervis lateralibus (basalibus inclusis) utrinque 4-6, prominulis, rete venularum utrinque prominulo; petiolis 4-6 cm. longis glabrescentibus; inflorescentiis paniculatis terminalibus minute puberulis, circiter 28 cm. longis pedunculis 3 cm. longis inclusis, ramulis primariis oppositis, utrinque 10, inferioribus ad 13 cm. longis, dichotome ramulosis, bracteis linearibus ad 5 mm. longis; floribus minutis, circiter 4 mm. longis, pedicellis 1 mm. longis, bracteolis ad 1 mm. longis; calycibus campanulatis, 2 mm. longis, puberulis, 5-dentatis; corollae tubo 3-4 mm. longo, extus puberulo, 5-lobato, lobis 1-2 mm. longis; staminibus 4, leviter exsertis; stylis 4-5 mm. longis, stigmatibus 2-lobato, lobis acutis.

KWANGSI: Ch'uan District, Pai-yun-an and vicinity, W. T. Tsang 27743 (TYPE), June 26, 1937, a shrub 20 ft. high, fairly common in thickets on steep slopes, flowers white, fragrant. KWANGTUNG: Sin-fung District, Hau T'ong Shan, Fuk Lung Monastery, Y. W. Taam 824, June 1-19, 1938, a shrub 10 ft. high, fairly common in thickets, flowers light yellow.

This species is apparently near *Clerodendron cyrtophyllum* Turcz., but it is readily distinguished by the much broader leaves, the more elongated panicles, and the very small flowers.

*Clerodendron kiangsiense* Merrill in herb. sp. nov.

Frutex circiter 2.5 m. altus, ramulis dense brunneo-puberulis, haud lenticellatis; foliis chartaceis longe petiolatis ovato-oblongis, 9.5-12 cm. longis, 5.5-7 cm. latis, acuminatis, basi subtruncatis, margine integris, utrinque parce puberulis, venis lateralibus utrinsecus 4-6, supra subconspicuis, subtus elevatis, rete venularum supra inconspicuo, subtus prominulo; petiolis 2-4.5 cm. longis, puberulis; inflorescentiis cymoso-paniculatis, ad 10 cm. longis, pedunculis 5.5-6 cm. longis, puberulis, bracteis foliaceis oblongis acuminatis, 8-9 mm. longis, 3-4 mm. latis, puberulis, consperse glandulosis;

floribus plus minusve confertis, pedicellis 1–2 mm. longis, bracteolis linearibus, 2–3 mm. longis; calycibus campanulatis, 5–6 mm. longis, puberulis, consperse inconspicue glandulosis, 5-dentatis; corollae tubo 1.2–1.5 cm. longo, haud 1 mm. lato, gracile, superne consperse puberulo, inferne glabro, lobis plerumque oblongis, 5–7 mm. longis, 1.5–3 mm. latis, extus plus minusve puberulis; staminibus circiter 1 cm. exsertis; stylis 1 cm. exsertis, stigmatibus 2-lobatis, lobis acutis.

KIANGSI: Southern Kiangsi, between Kit-than and Sungwu, *J. L. Gressitt 1554* (TYPE), July 1, 1936, a shrub 2.5 m. high, alt. 400 m., flowers white.

This species is near *Clerodendron kwangtungense* Hand.-Maz., differing in the more compactly arranged flowers, in the puberulent and glandular calyces and bracts, and in the absence of lenticels. *Chung 2021* of Pangyung, Chekiang, referred by P'ei (Mem. Sci. Soc. China 1(3): 152. 1932) to *Clerodendron kwangtungense* Hand.-Maz., undoubtedly represents the same species.

## RUBIACEAE

### *Ophiorrhiza* Linnaeus

*Ophiorrhiza lignosa* Merr. *Brittonia* 4: 176. 1941.

KWANGTUNG: Shih Wan Tai Shan, *H. Y. Liang 69981*, Aug. 5, 1937. KWANGSI: Nan Tanyuan, *C. Wang 40946*, July 3, 1937. Originally described from Upper Burma. New to China.

### *Dunnia* Tutcher

*Dunnia sinensis* Tutcher, *Jour. Linn. Soc. Bot.* 37: 69. 1905, *Repert. Nov. Sp.* 2: 111. 1906; Chun, *Sunyatsenia* 4: 260. *f. 45. t. 43.* 1940.

KWANGTUNG: Lung-men District, Nan Kwan Shan, Sheung P'ing Village, *W. T. Tsang 25277*, May 29–31, 1935, *25345*, June 1–19, 1935, a shrub 1½–3 ft. high, fairly common in swampy thickets, flowers yellow.

This species has been previously collected only twice, and, including the type collection, only the fruits have been known. The two numbers cited above represent the first flowering specimens collected.

Inflorescences terminal, cymose, about 9–10 cm. long, finely pubescent, the peduncles 6–6.5 cm. long, shortly 4-branched, the pedicels 2–3 mm. long; calyx-tube 1.5 mm. long, minutely 4- or 5-denticulate; petaloid calyx-lobes about 4 in each inflorescence, ovate, about 4.5 × 1.5 cm., acute at both ends, glabrous, 3-nerved, with a stipe about 1 cm. long; corolla-tube campanulate, about 1.2 cm. long and 2 mm. broad, the upper end enlarged, puberulous without, villose within, the lobes 4 or 5, broadly triangular-ovate, about 2 mm. long and 1.5 mm. broad, acuminate; stamens inserted on the upper half of the tube, the anthers 1.5 mm. long, linear-oblong, the filaments about 1 mm. long; styles about 5–6 mm. long, the stigmas 2-fid.

### *Mussaenda* Linnaeus

*Mussaenda kwangtungensis* sp. nov.

Frutex scandens 1–2.5 m. altus, ramis brunneis, ramulis teretibus brunneis adpresse cinereo-pubescentibus; foliis petiolatis tenuiter chartaceis lanceolato-ellipticis, 7–9 cm. longis, 2–3 cm. latis, longe acuminatis, basi attenuatis, margine integris, utrinque parce pubescentibus vel glabrescentibus, nervis lateralibus utrinsecus 4–6 arcuato-ascendingibus, utrinque con-

spicuis, venis tertiariis utrinque obscuris; petiolis circiter 5 mm. longis, pubescentibus; stipulis linearibus, 1.5–2 mm. longis, dense pubescentibus, caducis; inflorescentiis terminalibus cymosis paucifloris vix ramosis compactis, pedunculis circiter 5 mm. longis, adpresse pubescentibus; floribus subsessilibus; calycis tubo oblongo, 3 mm. longo, pubescente, lobis normalis 5 linearibus, circiter 2.5 mm. longis, dense pubescentibus, lobis petaloideis in unusquisque inflorescentia 2–4 oblongo-ovatis, 3.5–5 cm. longis, 1.5–2.5 cm. latis, apice acutis, basi cuneatis, 5-nerviis, longe stipitatis, stipite 1.5 cm. longo; corollae tubo circiter 4 cm. longo, 1 mm. lato, superne vix ampliato, extus adpresse pubescente, intus superne dense villosa, lobis ovatis acuminatis, 5 mm. longis; staminibus inclusis, antheris 5 mm. longis, stylis brevissimis bilobatis, 3 mm. longis, glabris.

KWANGTUNG: Lung-men District, Nan Kwan Shan, Sheung P'ing Village, *W. T. Tsang* 25263, May 29–31, 1935, a climber 3 ft. high, fairly common in thickets, flowers yellow; Sin-fung District, Hau T'ong Shan, Fuk Lung Monastery, *Y. W. Taam* 891 (TYPE), June 1–19, 1938, a semi-woody climber 7 ft. high, fairly common in swamps, flowers yellow.

A species near *Mussaenda divaricata* Hutchinson, but readily distinguished by its smaller, narrower leaves with fewer nerves, and the more slender, much longer corolla-tubes.

### Tarenna Gaertner

*Tarenna mollissima* (Hook. & Arn.) B. L. Robinson, Proc. Am. Acad. 45: 405. 1910; Merr. Philip. Jour. Sci. Bot. 13: 160. 1918; Metcalf, Jour. Arnold Arb. 13: 29. 1932; Rehder, Jour. Arnold Arb. 16: 320. 1935.

*Cupia mollissima* Hook. & Arn. Bot. Beechey Voy. 192. 1833.

*Mussaenda kuliangensis* Metcalf, Lingnan Sci. Jour. 11: 527. 1932, syn. nov.

Metcalf, in 1932, reduced *Tarenna incana* Diels and *T. vestita* Diels to the synonymy of *T. mollissima*. In the same year, however, he described a specimen from Fukien as *Mussaenda kuliangensis*, which seems clearly to belong with *Tarenna mollissima*. Fukien specimens in the herbarium of the Arnold Arboretum are: *Chung* 2316, 2236, 3731, 3793, 6605, 6687, 8086, *Uong Sing Po* 12091, *Gressitt* 1692, *J. B. Norton* 1474. The last named specimen is the type of *Mussaenda kuliangensis*.

### Randia Linnaeus

*Randia Henryi* Pritzl, Bot. Jahrb. 29: 581. 1901.

KWANGTUNG: Ho-yuen District, Kwai Shan, Tsing-lo-kong Village, *W. T. Tsang* 28692, April 1 or 2, 1938, a shrub 10 ft. high, fairly common in thickets, flowers whitish yellow, fragrant. KWANGSI: Yao Shan, Ping Nan, *C. Wang* 39072, April 15, 1936, 39125, May 8, 1936, 39330, a shrub or small tree, in dense forests, flowers yellowish white; Yao Shan, Tseung-yuen, *C. Wang* 39383, June 16, 1936, a tree 10 m. high, in mixed woods; Hing-on District, Wah Kong, *Z. S. Chung* 83663, Aug. 29, 1937, a tree in woods, fruit young, deep green. Yunnan, Szechuan, Kweichow. New to Kwangsi and Kwangtung.

### Gardenia Ellis

*Gardenia stenophylla* Merr. Philip. Jour. Sci. Bot. 19: 678. 1922.

KWANGTUNG: Shih Wan Tai Shan, *H. Y. Liang* 69634, July 14, 1937, 69969, Aug. 3, 1937, a shrub 2–3 m. high, in woods along streams, flowers white. KWANGSI: Shang-sze District, Shih Wan Tai Shan, *W. T. Tsang* 24115, Aug. 26, 1934, 23806, July 11–30,

1934, a woody plant, abundant in swampy thickets, fruit yellow. Hainan. New to continental China.

**Geophila** D. Don, nomen genericum conservandum propositum

The genus *Geophila* D. Don, Prodr. Fl. Nepal. 136. 1825, consisting of about forty species, is widely distributed in the tropics of both hemispheres. Don's name is antedated by *Geophila* Bergeret, Fl. Bass.-Pyrén. 2: 184. 1803, which is a synonym of *Merendera* Ram. (1798) of the Liliaceae. Under the homonym rule now in effect, *Geophila* D. Don is thus invalidated by *Geophila* Bergeret. Inasmuch as Don's name is well known and about forty species are already ascribed to it, it is proposed that the name *Geophila* D. Don (1825), non Bergeret (1803), be included in the list of *nomina generica conservanda*.

*Geophila exigua* sp. nov.

Herba 8–10 cm. longa, caulibus prostratis, pubescentibus, nodis radican-  
tibus, internodiis ad 2 cm. longis; foliis oppositis, petiolatis, ovato-orbicu-  
laribus, ad 1.5 cm. longis et 1.4 cm. latis, acutis vel subrotundatis, basi  
truncatis, utrinque sparse setosis, venis lateralibus 3 vel 4, supra incon-  
spicuis, subtus elevatis, venulis obscuris; petiolo 6–12 mm. longo; floribus  
terminalibus solitariis, pedicellis 4–5 mm. longis, bracteis 1 vel 2, linearibus,  
3–6 mm. longis; calycis tubo brevi, 1–1.5 mm. longo, 5-lobato, lobis lanceo-  
latis acuminatis, 2.5 mm. longis; corollae tubo 10–16 mm. longo, 1.5 mm.  
lato, inferne subglabro, superne villosa, lobis 5, valvatis, oblongo-ovatis,  
circiter  $6.5 \times 3.5$  mm., margine ciliatis; staminibus 5, inclusis vel exsertis,  
antheris lineari-oblongis, 1.5–2 mm. longis, filamentis 10–15 mm. longis;  
ovario 2-locellato, stylis inclusis vel exsertis, 15–20 mm. longis, stigmate  
2-lobato, lobis late ovatis.

KWANGTUNG: Tseng-shing District, Nan Kwan Shan, *W. T. Tsang* 20330, April  
25, 1932, in shady places, flowers white; Jen-hwa District, Man Chi Shan, Shak Pik Ha  
Village, *W. T. Tsang* 26112 (TYPE), April 1–10, 1936, 4 in. high, fairly common in  
thickets on steep slopes, flowers white, fragrant.

A species bearing perfect but dimorphic flowers with either exserted  
stamens and short included styles or included stamens and long exserted  
styles. It can be distinguished from *Geophila herbacea* (L.) K. Schum.  
by the much smaller leaves and the much larger flowers.

**Paederia** Linnaeus

*Paederia laxiflora* Merrill in herb. sp. nov.

Herbacea vel suffruticosa scandens, circiter 2 m. alta, floribus exceptis  
glabra vel subglabra, caulibus laevibus glabris 3 mm. diametro, ramulis ulti-  
mis teretibus glabris 1 mm. diametro; foliis oppositis lanceolatis, chartaceis  
vel submembranaceis, plerumque 15–19 cm. longis, 1.5–3 cm. latis, graciliter  
acuminatis, basi subtruncato-rotundatis, in ramulis junioribus minoribus et  
basi acutis, utrinque glabris, supra subviridibus, subtus pallidioribus sub-  
glauciscentibus, nervis primariis utrinsecus 6, gracilibus distinctis adscen-  
dentibus; petiolo 1.5–2 cm. longo, glabro; inflorescentiis axillaribus ter-  
minalibusque longe (3–7 cm.) pedunculatis laxe paniculatis glabris vel  
ramulis ultimis parce pubescentibus laxis; floribus candido-purpureis  
sessilibus vel breviter pedicellatis; calycibus glabris, 1 mm. longis, in sicco

nigris, dentibus brevissimis; corollae tubo 6–7 mm. longo, extus dense breviter pubescente.

FUKIEN: Lung Chou San, south of Shanghang, *J. L. Gressitt 1663* (TYPE), July 21, 1936, in bamboo forests, alt. 750 m., flowers whitish-lavender.

One of the allies of *Paederia scandens* (Lour.) Merr. (*P. tomentosa* Bl.), but with greatly elongated, very narrow, lanceolate, rather slenderly acuminate leaves, which are abruptly subtruncate-rounded at the base, although the smaller leaves on the branchlets are often acute at the base. Its alliance is clearly with *P. stenophylla* Merr.

### Lasianthus Jack

*Lasianthus cyanocarpus* Jack, Trans. Linn. Soc. 14: 125. 1823.

KWANGTUNG: Foo Lung, Shih Wan Tai Shan, *H. Y. Liang 69758*, July 18, 1937, a shrub 1 m. high, in dense woods, flowers white. Sumatra to Borneo, the Philippines, Indo-China, Formosa, and Hainan. New to Kwangtung.

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